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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,361	08/19/2003	James Charles Bohling	A01410	4833

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PATENT DEPARTMENT
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EXAMINER

BADIO, BARBARA P

ART UNIT PAPER NUMBER

1617

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/643,361

Applicant(s)

BOHLING ET AL.

Examin r

Barbara P. Badio, Ph.D.

Art Unit

1617

-- The MAILING DATE of this communicati n appears on the cover sheet with the correspondence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/01/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

First Office Action on the M e r i t s

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Webber et al. (US 5,563,220), Sanghvi et al. (US 6,239,220), Stockel et al. (US 4,031,110) and Nagle et al. in combination.

Webber et al. teaches the conversion of trityl alcohol resin to trityl chloride resin with acetylchloride in the presence of a solvent such as toluene or dichloromethane (see col. 2, lines 36-45; col. 5, line 61 – col. 6, line 27; Example 2).

Sanghvi et al. teaches reacting a triarylmethyl alcohol with a halide reagent, for example, acetylchloride, thionylchloride etc., to form a triarylmethyl halide (see col. 3, lines 23-24; col. 12, lines 49-67; col. 18, lines 55-67).

Stockel et al. teaches the formation of "Vilsmeier" reagent by reacting a N,N-disubstituted formamide, for example, N,N-dimethyl formamide, with a halogenating agent such as thionyl chloride and the utilization of said reagent with pentaerythritol to produce pentaerythritol monochlorohydrin (see col. 1, lines 56-63; col. 2, lines 19-21,

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41-60; col. 3, lines 22-52). The reference teaches the utilization of about 0.5 to about 3 moles of N,N-substituted formamide (see col. 3, lines 22-35).

Nagle et al. teaches the conversion of β -aminoalcohols to β -aminobromides using thionyl bromide and N,N-dimethyl formamide (see the entire article, especially Abstract; Scheme 1). The reference teaches the addition of N,N-dimethyl formamide as a catalyst accelerates the reaction through the Vilsmeier-Haack type complex (see paragraph bridging pages 3011-3012).

The combination of cited prior art makes obvious the conversion of supported/unsupported alcohols to the corresponding halide with a halide reagent in the presence of a solvent (see the discussion above). The claimed process differs from teaching of Webber in the addition of an amide to the reaction. However, the skilled artisan would have been motivated to utilize N,N-disubstituted formamides in the amounts recited by the instant claims in said reaction because of the teaching by the prior art that said addition would accelerate the reaction (see especially Stockel and Nagle et al.). Therefore, based on the teachings of the cited prior art, the claimed process is prima facie obvious.

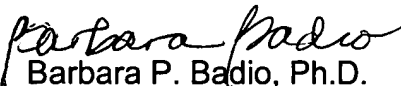
Telephone Inquiry

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara P. Badio, Ph.D. whose telephone number is 571-272-0609. The examiner can normally be reached on M-F from 6:30am-4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Barbara P. Badio, Ph.D.
Primary Examiner
Art Unit 1617

BB
June 5, 2006